METHODIK DER FORM- UND BILDGESTALTUNG

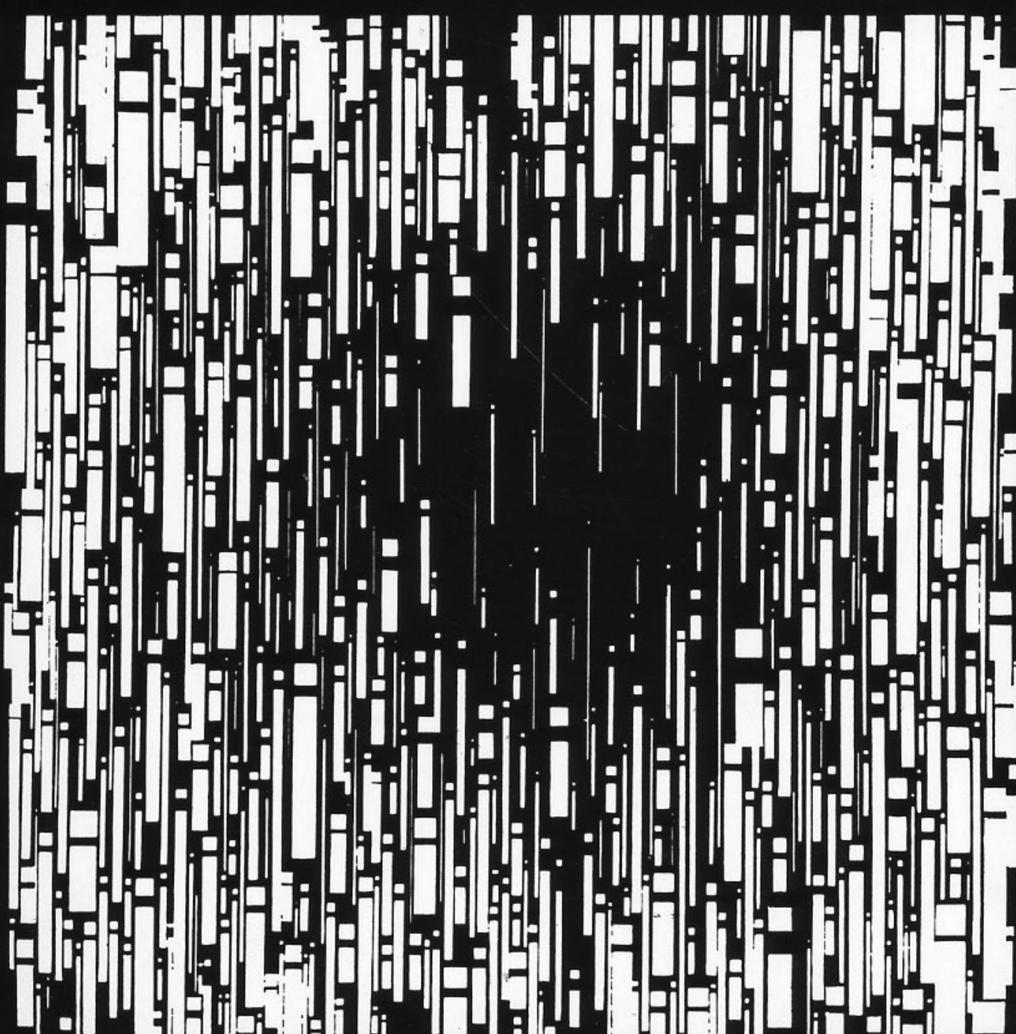
Aufbau
Synthese
Anwendung

MANUEL DE CRÉATION GRAPHIQUE

Forme
Synthèse
Application

GRAPHIC DESIGN MANUAL

Principles
and
Practice



Armin
Hofmann

The idea of a dot must be understood in a very broad sense. All plane figures which have a center and are perceived as closed forms may be described as being dot-shaped. And even if a dot expands, it still remains a dot. A mere increase in the size of an element is not enough to alter its essential character. We must be able to recognize an element as such in spite of the accidentals of a particular embodiment. The dot may grow large and cover a flat area; in which case the question arises as to its precise external form, its color value and its surface texture. But when it is found in its smallest form, all these questions are superfluous.

Because it is circumscribed, balanced, non-figurative and weightless, the smallest dot is particularly well adapted to demonstrating the most important principles of composition. It is the most maneuverable element in the whole field of pictorial art – it is really a building block of instruction.

It is also rewarding from the technical point of view to look into the mobility of the dot. When any pictorial work is transferred to a printing surface, it is the dot alone that can make graded tone values, colors, transitions and blends reproducible. The whole technique of graphic reproduction is based on the small unit of the dot.

Exercises with dots – the most important graphic element – are particularly instructive when performed in the medium of lithography. Especially in our day when for the first time design is developing along separate lines from printing techniques, a great deal can be learned from the close artistic and technical relationship which is possible between the original and the reproduction in lithography.

If we place the smallest dot in the center of a square, its forces begin to make themselves felt at once. The two values dot–background must, however, always be proportioned to each other, otherwise too large a dot disrupts too small a background or too large a background overwhelms too small a dot.

In the safe middle ranges the dot readily establishes contact with its environment. The problem assumes a particular interesting form in marginal situations. At what moment does the dot emerge as such from its environment? Are there already relationships at this early stage of its appearance? It takes considerable artistic discernment to seek out and fix the extreme limits of a consonance between two elements. Throughout the region of marginal consonances there are great possibilities of producing tensions. The most marked tensions arise in the neighbourhood of disturbing forces, in the zone where there is a danger of one element being engulfed or overpowered by another.

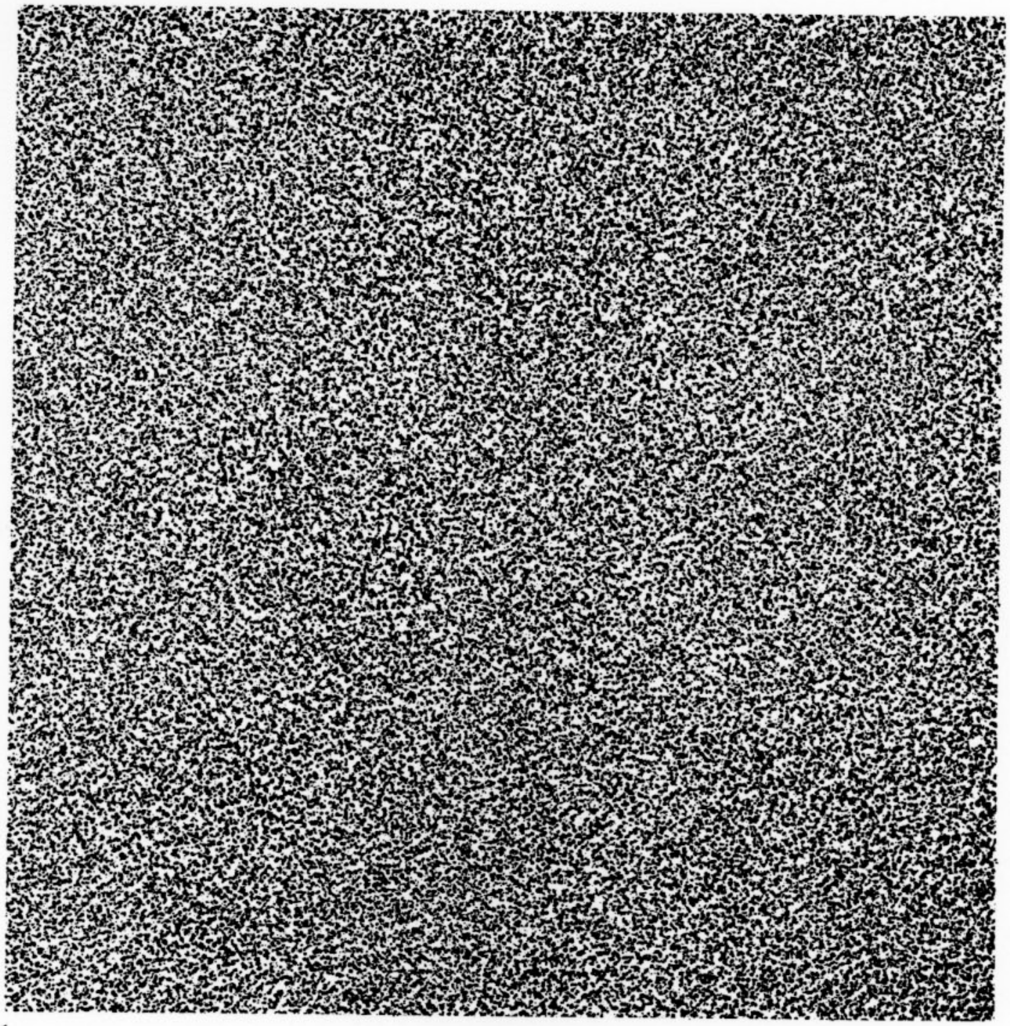
Every dot, even the smallest, has radiating power; it is most at home in the center of its environment. But the dot–plane relationships invariably proceed exclusively outwards from the dot or inwards towards it. There is something unconditional and final about a dot in the center. In practical applications, it is true, the radiating power of the absolute center is of extreme importance, but a freer play of forces is needed to create more vital relationships. If the dot is displaced from the center, the static relationship between dot and background is unsettled. Above all, the somewhat passive plane of the background now becomes aggressive. It succeeds in startling the dot into flight, driving it round or forcing it to the outer limits. The illusion of space might even be evoked.

If we place another dot by the side of the first one, the dot-background relationship, which was previously the only contact, now becomes secondary. The two dots determine what happens on the plane. Their forces are reciprocally engaged along a linear path. When appropriately arranged, they can cut the plane into two parts and break out of the format. If we shorten the distance between the dots so that they impinge on each other, we have a pair of dots out of which the most varied new dot structures develop as the degree of fusion between them increases. In a triangle of dots this reciprocal action along the

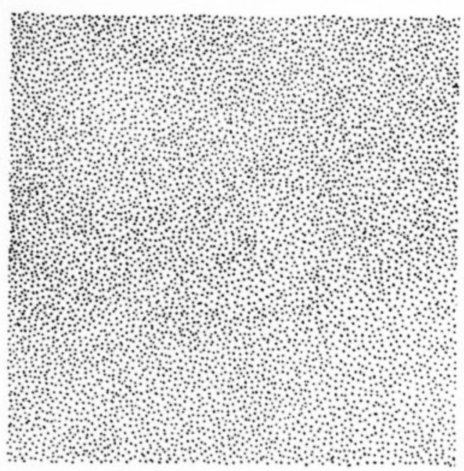
lines between the dots creates a stream of forces which is closed within itself; the movements remain within the format. Working with a large number of dots gives a rich variety of formulations: simple rows of dots, vertical and horizontal rows of dots (grid pattern), grouping, free and selective scattering, massing, variability in size, grey tone and color, and in texture.

Just as the expansion of the dot into a plane surface does not affect its nature, so the spatial expansion of the dot into a sphere leaves its essential character untouched. Through the addition of an extra dimension, the sphere simply gives added weight to the statement. The radiating power of the sphere is greater than that of the disc; through the addition of the new dimension, the pattern of forces has increased and the center must intensify its activity. Just as with the smallest dot, so in the case of the smallest sphere, for example, a speck of dust, the question of its characteristics does not arise, yet, hard though it is to visualize, these continue to exercise their effect.

In this book particular attention is paid to the combination of plane surfaces and three-dimensional elements. The reasons are twofold: first, to keep track of fundamental forces and, second, to enable us to make the transition from two-dimensional to three-dimensional designing in entirely concrete terms. We must endeavour to do away with artificially imposed limits which have now lost their validity.



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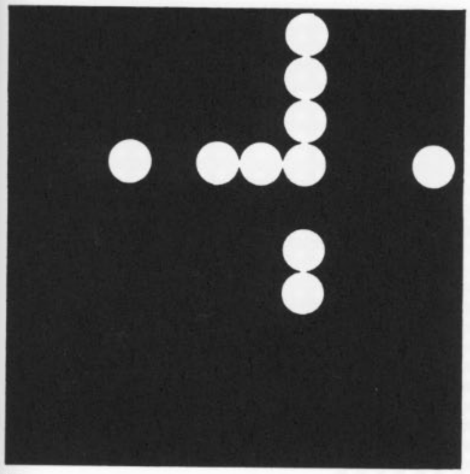


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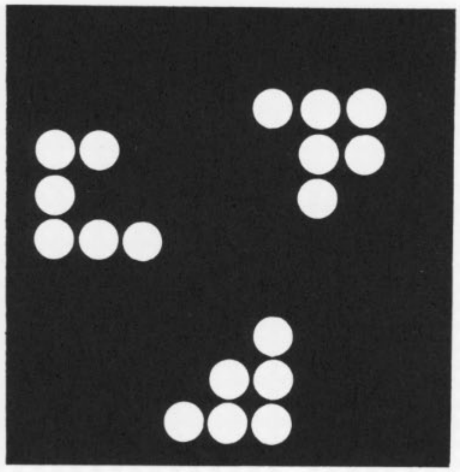
1
Der Punkt entsteht, wenn Bleistift oder Kreide über eine stark gekörnte Oberfläche gleiten. (Lithographie)
2
Der Punkt entsteht durch kurzes Aufsetzen einer Tuschfeder auf einem glatten Untergrund.

1
Le point naît du frottement d'un crayon ou d'une craie sur une surface fortement granulée. (Lithographie)
2
Le point naît du bref contact d'un stylo à encre de Chine sur un fond uni.

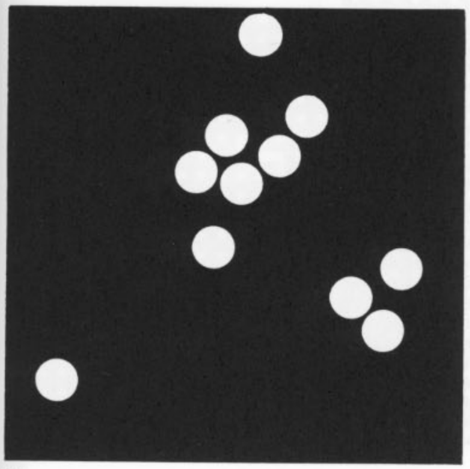
1
The dot is produced when a pencil or crayon is passed over a roughly grained surface. (Lithograph)
2
The dot ist produced by briefly touching a smouth surface with pen and India ink.



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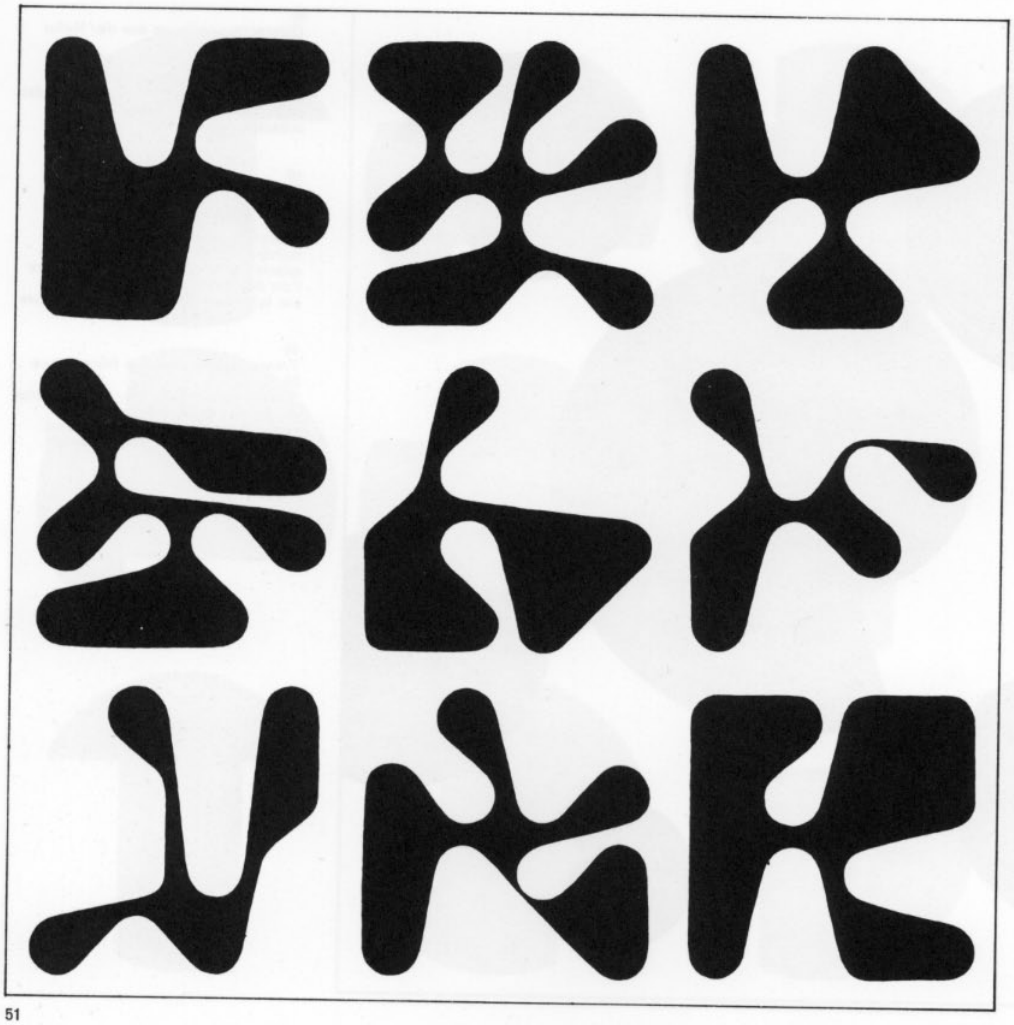


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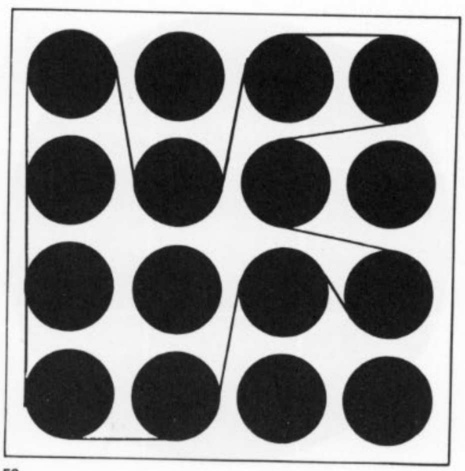
10
Punktekreuz aus einer Rastereinteilung herausgelöst
11
Drei Punktegruppen aus derselben Einteilung
12
Freie Streuung ohne Rasterbindung

10
Croix formée de points ouverts dans les mailles d'une trame. (Le nom de trame est donné à la décomposition d'une surface en un certain nombre de parties égales. La trame la plus simple est obtenue en traçant des horizontales et des verticales ayant entre elles le même espacement.)
11
Trois groupes de points provenant de la même trame
12
Libre dispersion sans relation avec la trame

10
Cross of dots separated out from the grid pattern
11
Three groups of dots from the same pattern
12
Free distribution without a grid pattern



51



52

51
Variationsübung: wachsende, fließende Gebilde begegnen sich. Ausgangslage: 16 Punkte. Einzelne Punkte werden herausgelöst und untereinander verbunden. Die so entstandenen 9 Variationen werden wieder zu einer Einheit zusammengebaut.
52
Ausgangslage für Nr. 51, Fig. 1
53
Umsetzungsübung nach der Natur. Punktebildung auf einem Herbstblatt. (Litographie)

51
Exercice de variations propre à exprimer des ensembles de forme fluide. Les 16 points d'une composition sont isolés et reliés différemment. Les 9 variations ainsi obtenues forment autant de compositions nouvelles.
52
Situation de départ pour le numéro 51, fig. 1
53
Exercice de transposition d'après nature. Formation de points sur une feuille d'automne. (Lithographie)

51
Study in variations: growing, fluid structures meet one another. Starting position: sixteen dots. Certain dots are singled out and linked together. The nine variations thus created are recombined into a new unit.
52
Starting position for No. 51, figure 1
53
Transposition exercise from nature. Dot formation on an autumn leaf. (Lithograph)



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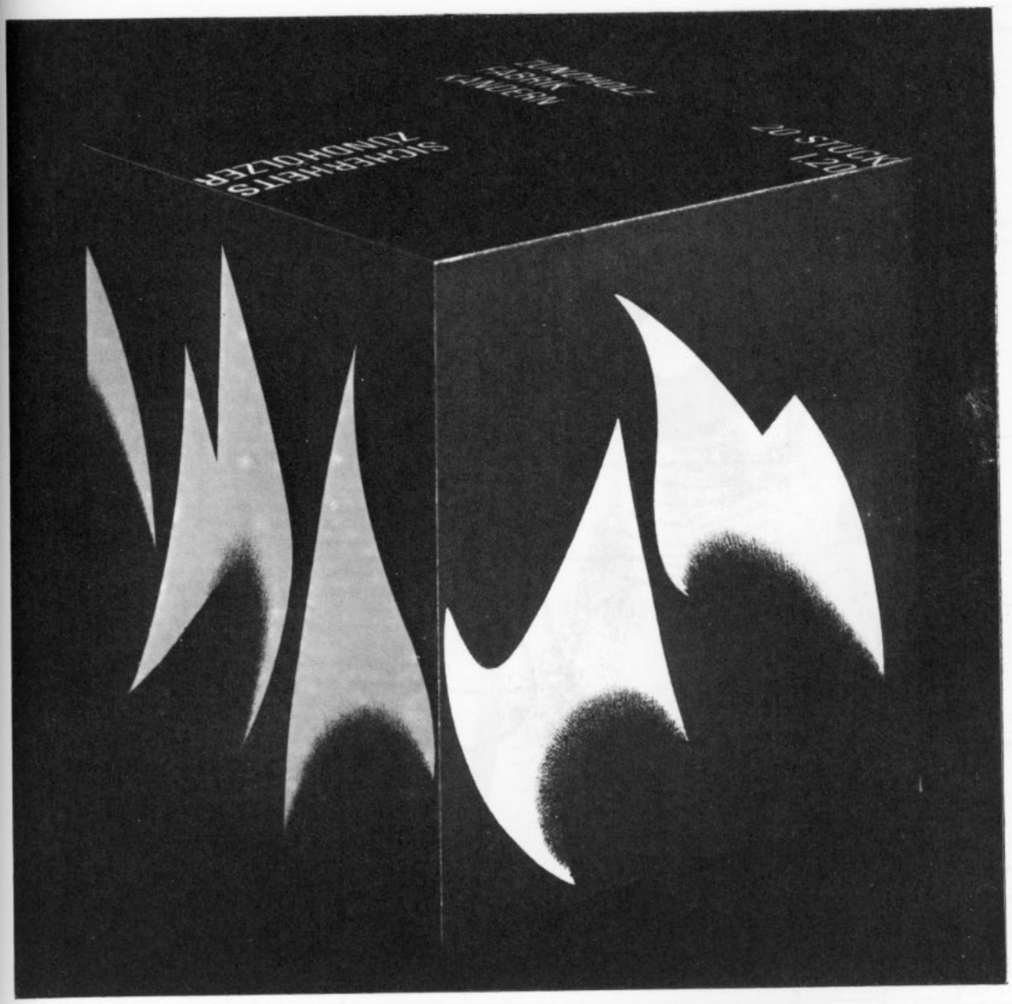
57
Herbstblatt-Übung. Bei stärkster Massierung von Punkten entstehen neue, kleinste, punktförmige Restformen. (Lithographie)
58
Büchse für ein Pflanzenschutzmittel. Verfolgten wir bei Nr. 43 und Nr. 44 Abwicklungen von Punktegruppierungen auf kubischen Körpern, ist hier der Zylinder als Übungskörper gewählt.

57
Exercice sur une feuille morte. Du fait de la forte concentration de points naissent des formes résiduelles nouvelles extrêmement petites, réduites elles-mêmes à des points. (Lithographie)
58
Boîte contenant un produit pour protéger les plantes. Alors qu'aux numéros 43 et 44 le développement des groupements de points se faisait sur un solide parallélipédique, il s'agit ici d'un cylindre.

57
Autumn leaf study. The dots are intensively massed together and leave over new and minute dot-shaped forms. (Lithograph)
58
Container for a plant insecticide. Whereas in No. 43 and 44 we saw how groups of dots were disposed over cubes, here the solid chosen is the cylinder.


Herba force
Pflanzenschutz-
mittel
gegen
Mehltau
Blattläuse
und Käferfrass
500gr Fr.8.50

58



63

62
Ausschnitt aus einem Schmetterlingsflügel. Der Punkt gerät in Fahrt. (5-farbige Kreide-Lithographie)
63
Entwurf für eine Kerzenpackung. Ähnliche Situation wie bei Nr. 62. Punkteflucht beim Aufflammen von Kerzen. (Verbindung Kreidestruktur/Fläche/Schrift, auf Offsetplatte gezeichnet)
64
Punkteflucht durch Druckbewegungen mit einer Kreide (Lithographie)

62
Fragment d'une aile de papillon. Le point s'élance. (Dessin à la craie en 5 couleurs – lithographie)
63
Projet pour emballage de bougies. Même situation qu'au numéro 62. Mouvement de fuite des points pour dessiner la flamme des bougies. (Association: structure de la craie/surface/caractères – dessiné sur plaque offset)
64
Mouvement de fuite des points provoqué par les déplacements de la craie (Lithographie)

62
Part of a butterfly's wing. The dot is set in motion. (5-color chalk lithograph)
63
Design for a candle box. Situation similar to No. 62. The dots take flight as the candles flare up. (Combination of crayon texture, surface and lettering, drawn on offset plate)
64
Streaming motion of dots, produced by a crayon moved under pressure (Lithograph)

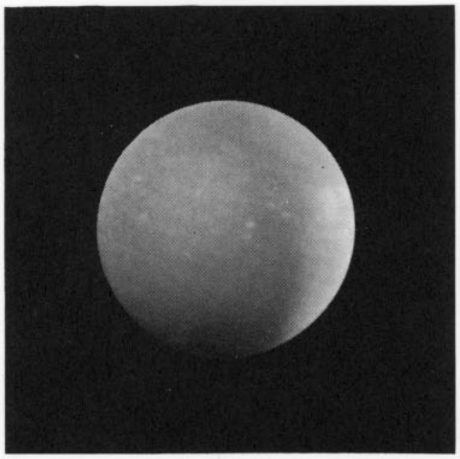


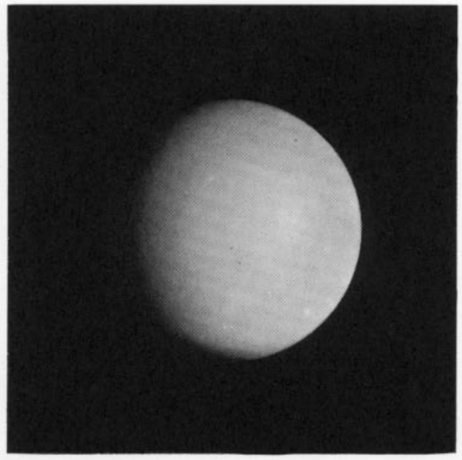
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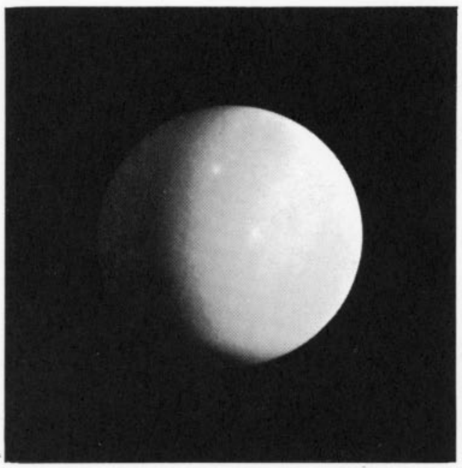
83 84 85 86 87 88
Die Kugel als Raumpunkt
(Verschiedene Lichteinfälle)

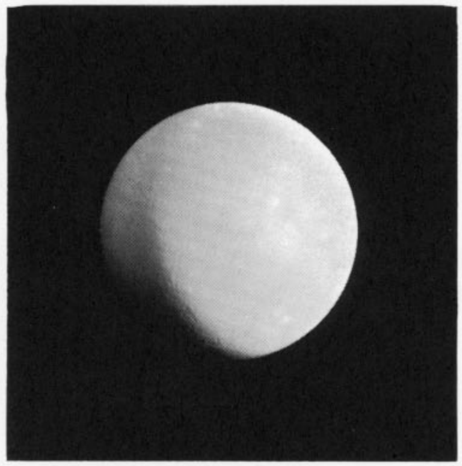
83 84 85 86 87 88
La sphère, point dans l'espace, sous différents éclairages

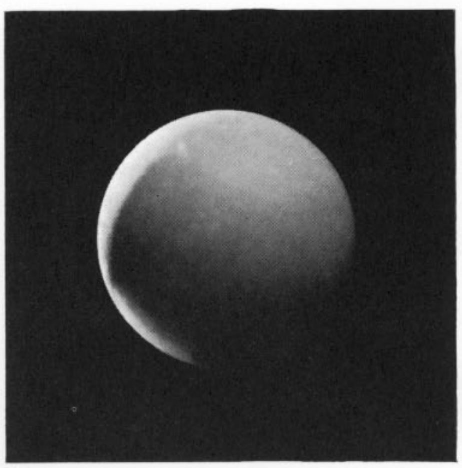
83 84 85 86 87 88
The sphere as a space-occupying dot
(Various forms of lighting)

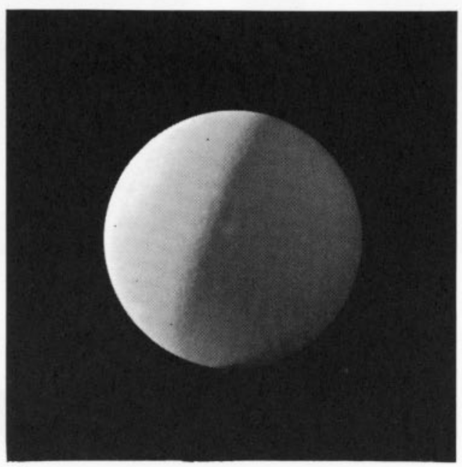

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In our exercises with dots the line figured repeatedly in the important role of a connecting link. In one case this connection between two distant dots is invisible – it is simply imagined; in another case where dots follow very closely upon one another in a linear arrangement, it already appears as an independent force. If one runs a pencil over a paper, a line appears which is made up of dots so small that they can no longer be recognized as such. Only by using suitable instruments, particularly the brush and drawing pen, can a compact line be produced with a fluid medium. But even in this case it should be remembered that the line is the visible trace of a moving dot. Hence the line is dependent on the dot; it presupposes the dot as its own basic element.

Movement is the real domain of the line. Unlike the dot, which is bound to a center and is therefore static, the line is dynamic by nature. It can be continued indefinitely in either direction, it is bound neither to a form nor to a center. If the line is nevertheless conceived as a basic element, this is only because the process that created it is no longer perceptible as such. The line is an element that has already gone through a process of growth.

If the dot is an important element in structure and analysis, the line performs the important duty of construction. It joins, articulates, bears, supports, holds together and protects; lines intersect and ramify.

The simplest configuration of lines is the grid of vertical or horizontal lines. If a thin line is repeated at constant intervals it produces a solid grey effect in which the single line is no longer discernible, analogous to the way in which the individual dot merges its separate existence into that of a uniform mass of dots.

If we remove individual lines from the grid, new ones instantly appear – but on a different plane. This makes us realize that two qualities of essentially equal value are operative in the grid: namely the black line and the white line, which are at all times interdependent. Two straight parallel lines produce a third enclosed between them. The relationship of negative–positive, one of the most important encounters between opposites in all design work, arises automatically. The space in-between, which is a by-product, is just as important as the element producing it.

Progressively increasing the distance between the lines, slowly thickening the line itself, taking away from above or below, slanting the line within the field of operations – all these are processes which, because of their very simplicity, recall fundamental but forgotten knowledge to our minds.

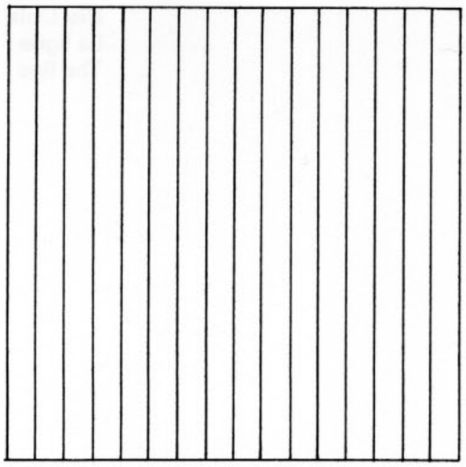
Like the dot, the line does not change its nature, however extended it becomes. But unlike the dot, which, however much enlarged, still appears to the eye as a dot, the line, when extended, rapidly passes from the field of vision. If the line is thickened too much in proportion to its length, the eye sees it as a plane surface. The line as such can only be mentally grasped in terms of the relationship between its length and width. It is more easily affected by distance than the dot.

The thin line, like the small dot, is not a suitable vehicle for color. Even if infinitely prolonged, it is difficult for it to give tone and color values any scope for display. If its thickness is increased enough for color to have an adequate field of action, then, to remain a line, its length must be extended beyond visual range. The black line loses its intensity and turns grey as it gets thinner. The white line holds out longest against a black background. It gains additional luminosity as it grows thinner.

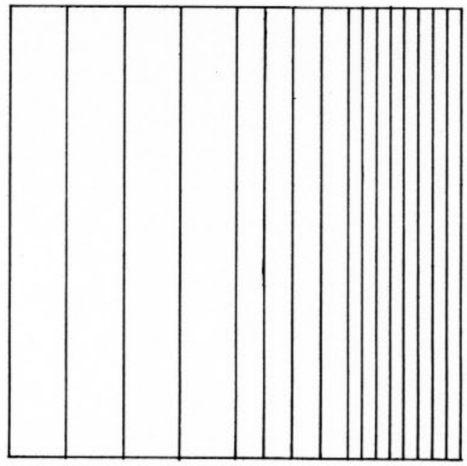
In the field of reproduction the woodcut, the linocut and the etching are particularly suitable for linear designs because in these original techniques both the material and the instruments lend themselves ideally to the production of line. In the woodcut and the linocut the line cut in the material appears negative (white on

black) in the print. For a black line on a white ground a more complicated process is necessary. The etching genuinely produces a positive black line on a white ground, although, to the superficial observer, the actual operation, the formation of the line, seems basically the same as that in the woodcut and the linocut. The etching is better suited than almost any other medium for making lines of extreme delicacy. The ungrained smooth lithographic stone, the offset plate and, more recently, the film, offer the least resistance to the production of line. Linear designs can be easily drawn with a pen or brush. The material itself sets no limits to refinements in the thickness of the stroke or to the rapidity with which the strokes can be executed.

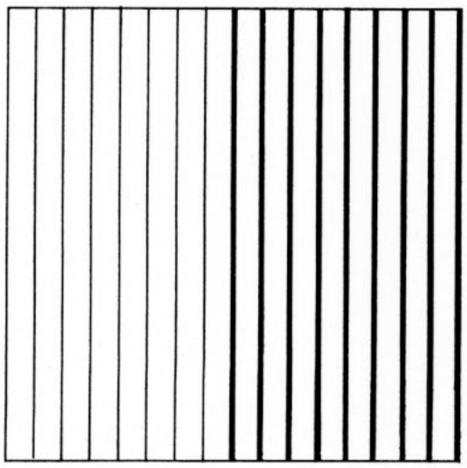
All these methods of reproduction have been rendered obsolete by the latest technical developments. All the same, they do afford the student today a practical opportunity of coming to grips with basic methods within the field of reproduction where processes are growing constantly more complicated. In these primary printing techniques trimmings and frills must be dispensed with. The purest expression of line, the manifestation of its essence so to say, is invariably attained with the most success when – like every other pictorial element – it is conceived with its reproduction by a printing technique in mind.



116



117



118

116
Gleichmäßige Wiederholung der senkrechten Linie
117
Wiederholung der senkrechten Linie mit dreimaliger Verengung der Abstände
118
Wiederholung von dünnen und von fetten Linien mit gleichbleibenden Abständen

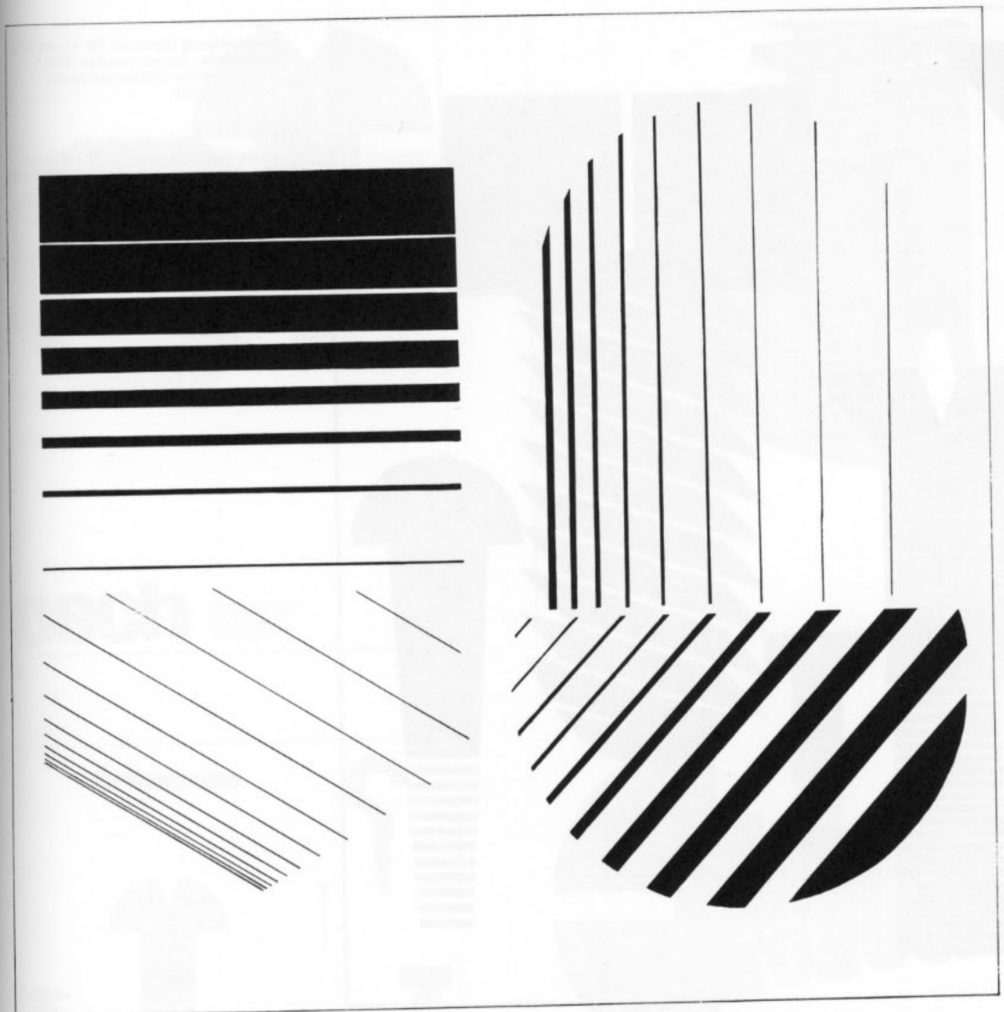
116
Répétition régulière de la ligne verticale
117
Répétition des lignes verticales avec trois resserrements différents des espacements
118
Répétition équidistante de lignes minces et de lignes épaisses

116
Uniform repetition of a vertical line
117
Repetition of a vertical line in which the distance between the lines is reduced three times
118
Repetition of thin and thick lines at regular intervals

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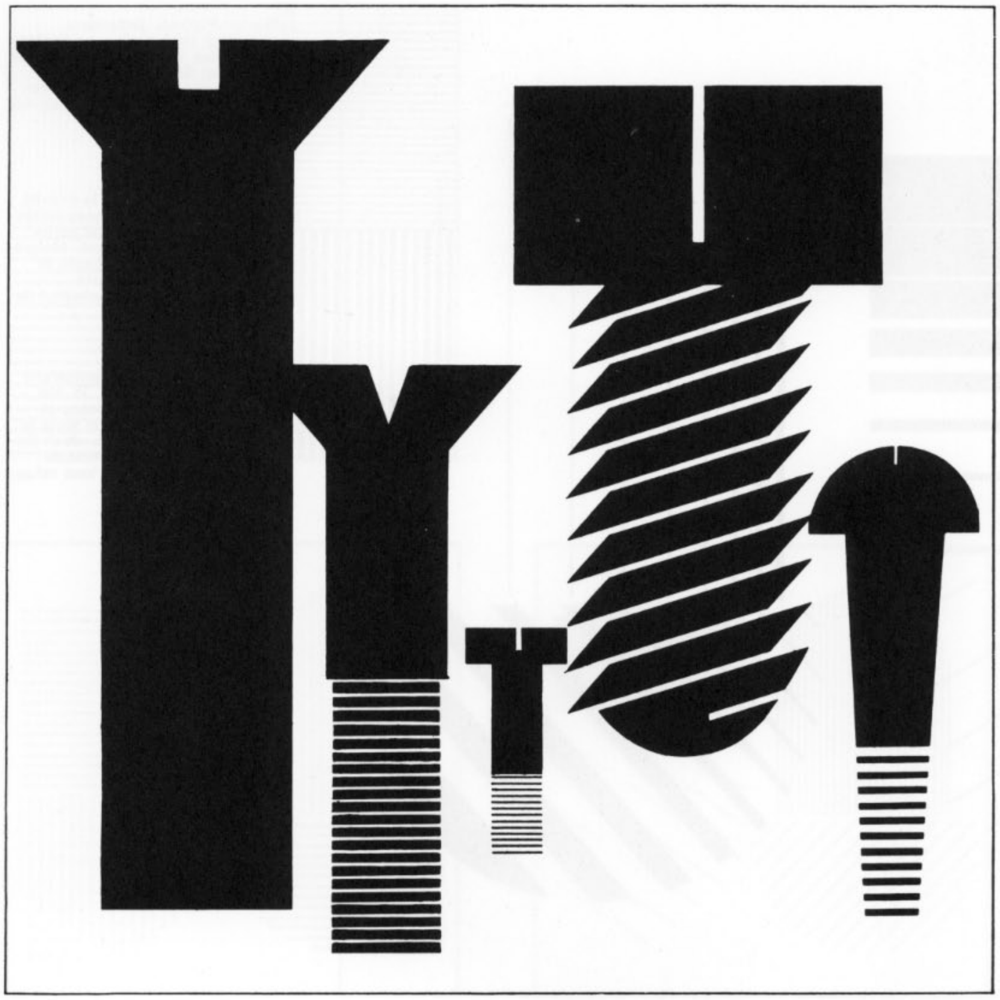


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127
Jaßkarten-Figuren. Besonders eindrücklich ist hier das wechselnde Spiel um den Vorrang der schwarzen oder weißen Streifen. Trotz der großen Bewegung, die das Linienspiel verursacht, bleibt es doch vor allem Tonwertersatz.

127
Figures de cartes à jouer.
Le jeu d'alternance entre la priorité visuelle accordée aux bandes noires ou aux bandes blanches est particulièrement impressionnant. Malgré le grand mouvement que cause le jeu de lignes, celui-ci reste cependant avant tout un substitut de valeurs tonales.

127
Playing card figures. A particularly impressive feature here is the interplay between the primacy of the black or white lines. In spite of the lively sense of motion which the play of lines imparts, it remains primarily a substitute for tone value.

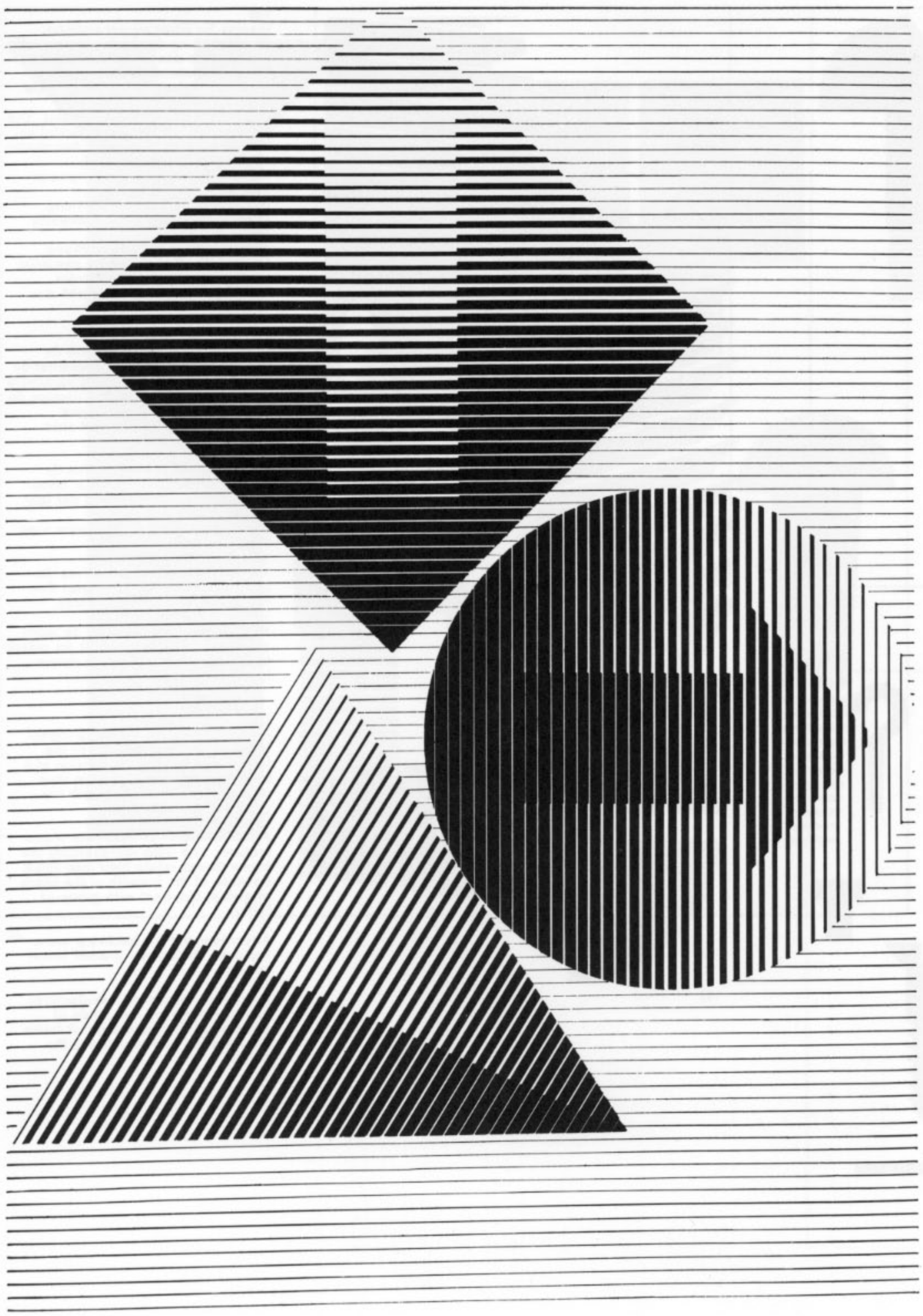


128

128
Ein weiteres Beispiel für abgestufte Grauwerte, hervorgerufen durch verschiedene Linienqualitäten (Linolschnitt)

128
Autre exemple de gris nuancés par des épaisseurs différentes de lignes (Gravure sur linoléum)

128
Another example of graded tones of grey produced by different qualites of lines (Linocut)

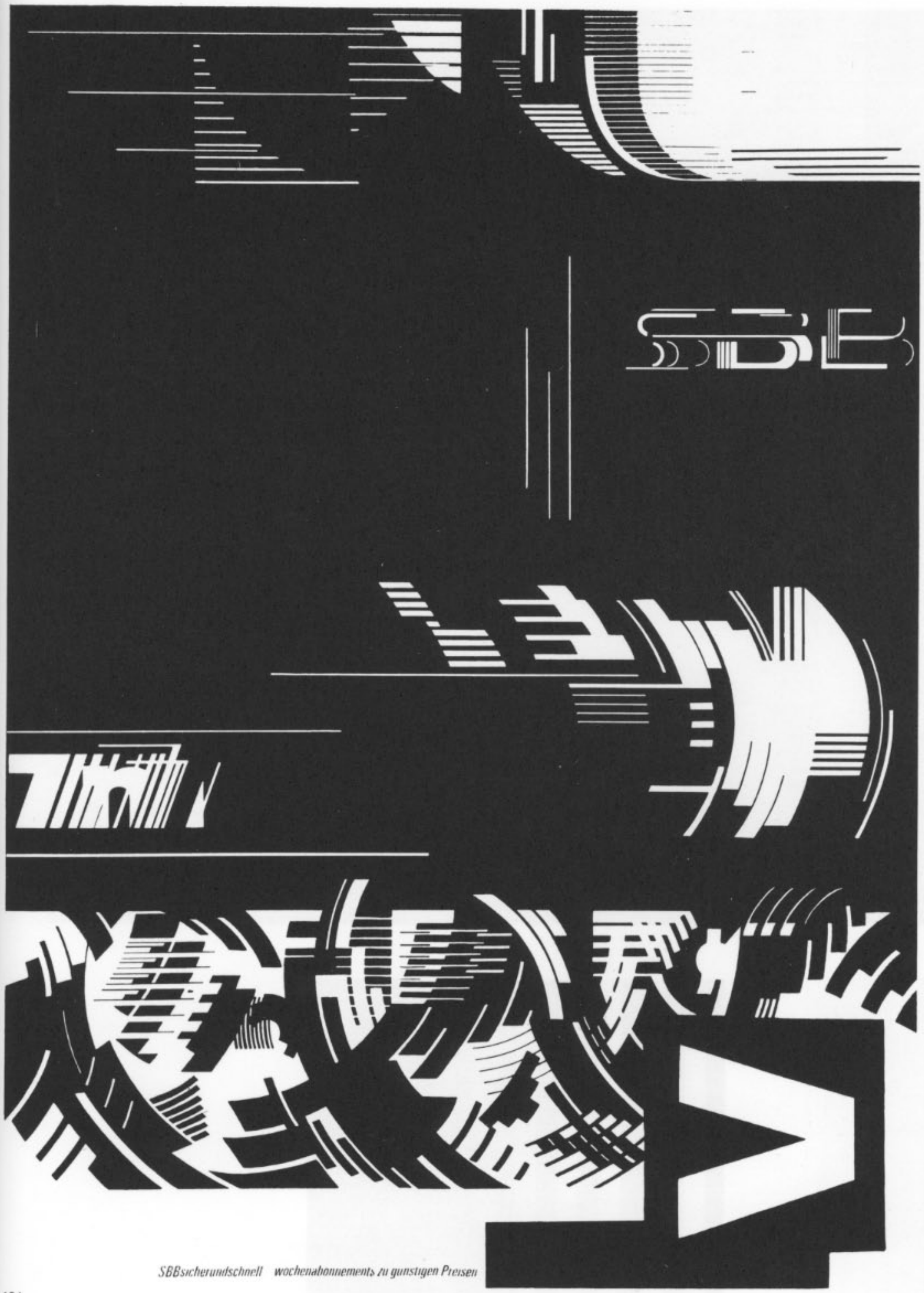


133

133
Vorstufe zu einem Verkehrsplakat. Die Anwendung der progressiv gestuften Linie erzeugt den Eindruck von Bewegung und Geschwindigkeit. Der gleichmäßig durchgezogene waagrechte Linienraster des Hintergrundes ist Träger der Gesamtbewegung.

133
Maquette d'affiche pour la circulation. L'utilisation de la ligne progressivement épaissie engendre l'impression de mouvement et de vitesse. La trame de l'arrière-plan formée de lignes horizontales équidistantes, est le support du mouvement global.

133
First stage of a traffic poster. The use of a progressively graded line evokes the impression of movement and speed. The regular pattern of horizontal lines provides the background against which the general movement takes place.



134

134
Eisenbahnplakat. Differenziertere Anwendung der aus den vorangegangenen Übungen gewonnenen Erkenntnisse. (Strichzeichnung)

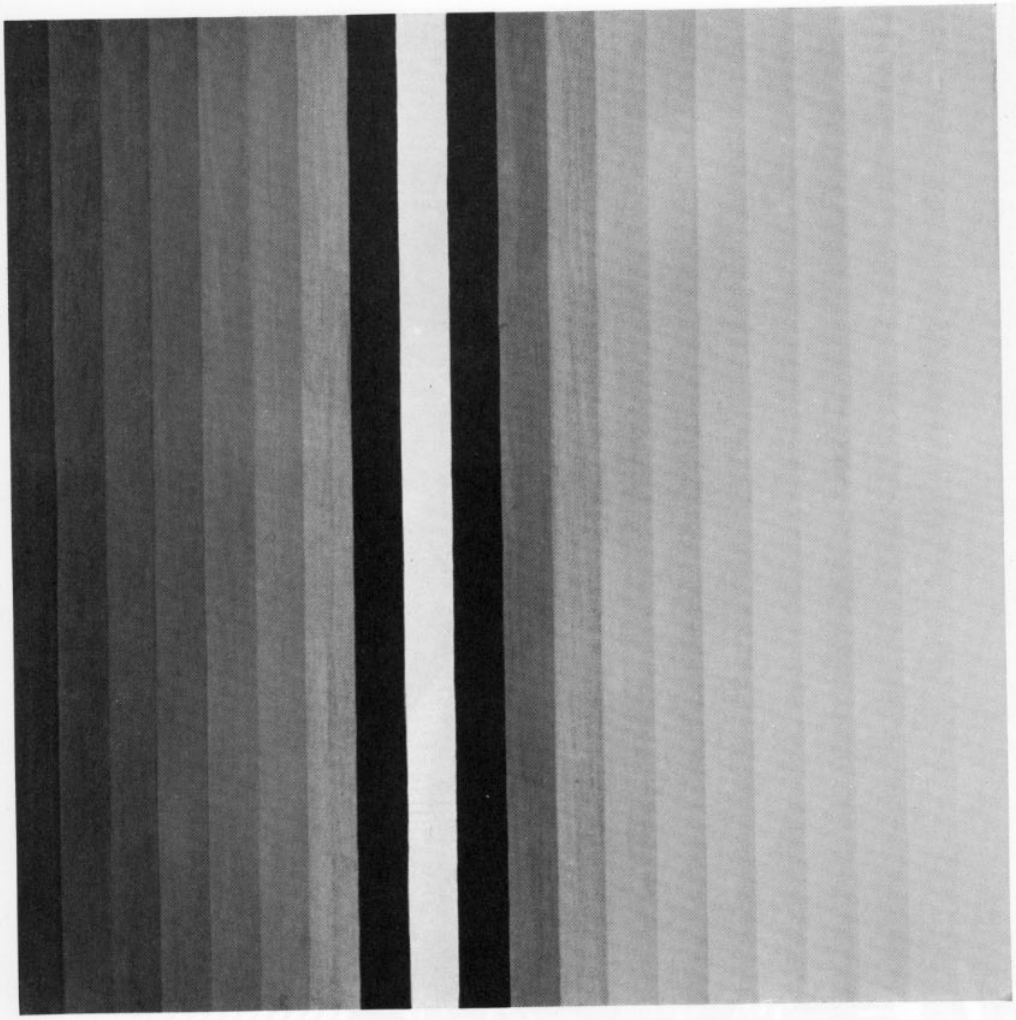
134
Affiche pour chemins de fer. Utilisation plus différenciée des connaissances acquises dans les exercices précédents. (Dessin au trait)

134
Railway poster. What has been learnt in the preceding exercises has been applied here in more elaborate forms. (Line drawing)

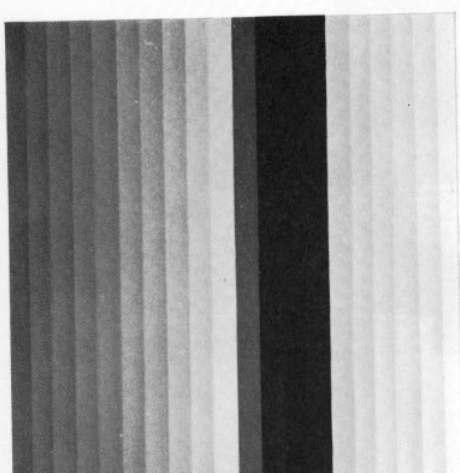
135 136 137
Die Illusion von Bewegungsabläufen, die bis jetzt durch eine Stufung von Liniendicke und Abständen geschaffen werden mußte, kann auch erzeugt werden durch die Verwendung von verschiedenen Tonwerten.

135 136 137
L'illusion du mouvement qui jusqu'ici devait être créée par la variation de l'épaisseur des lignes et leur distancement peut aussi être obtenue par l'emploi de différentes valeurs de tons.

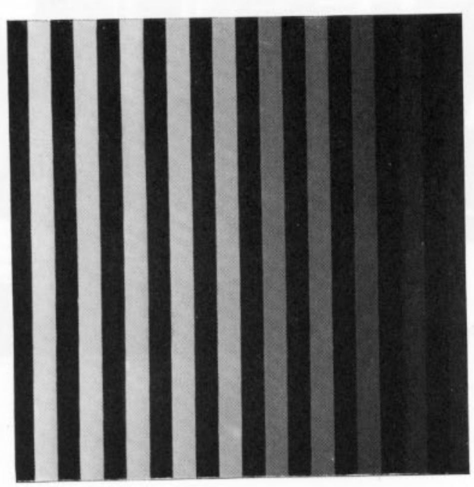
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The illusion of movement previously evoked by a gradation of line thicknesses and interspaces can also be produced by using different tone values.



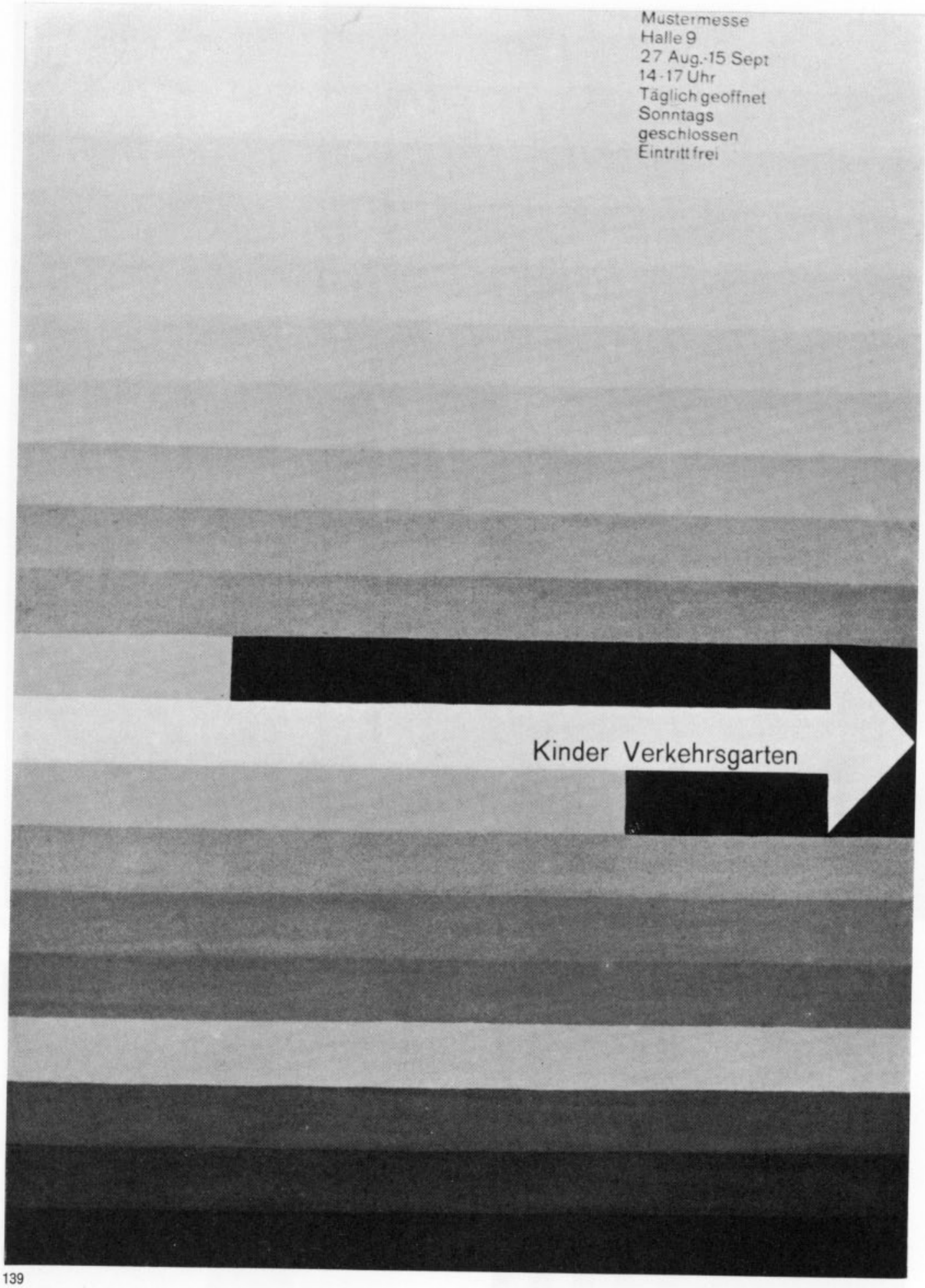
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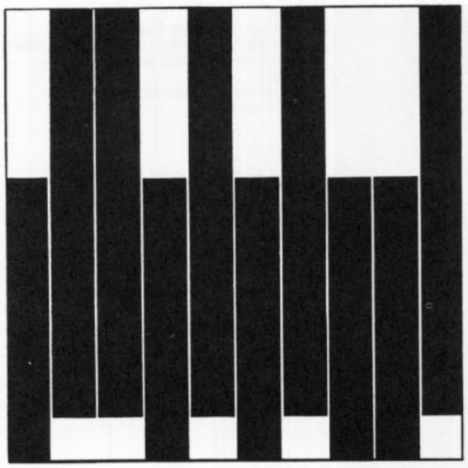


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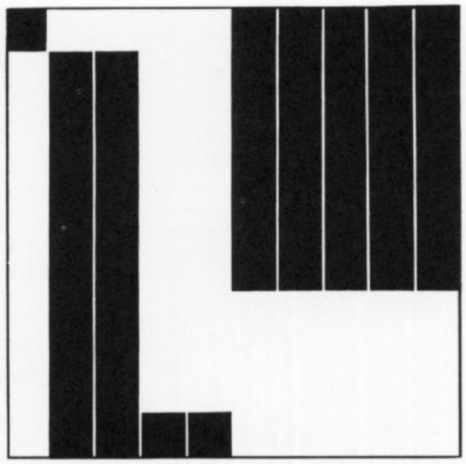
139
Kinderverkehrsgarten-Plakat. Eindringen eines Pfeiles in die Tonwertstufung.

139
Affiche destinée à un circuit de circulation pour enfants. Insertion d'une flèche dans les valeurs de tons.

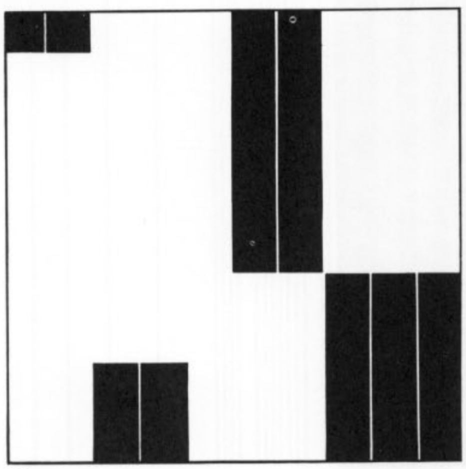
139
Poster for a children's traffic school. An arrow penetrates into the scale of tone values.



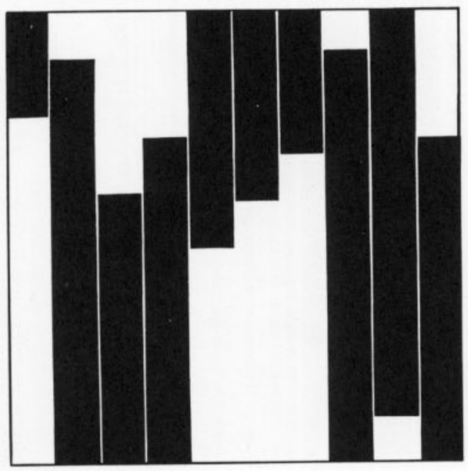
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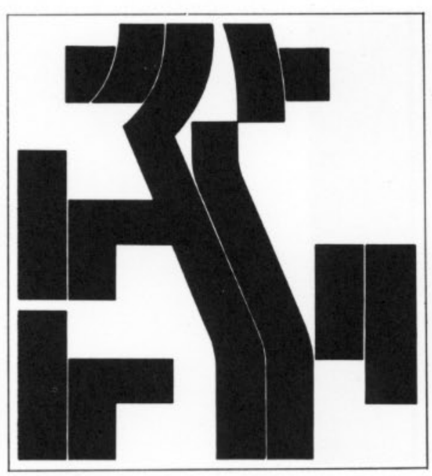


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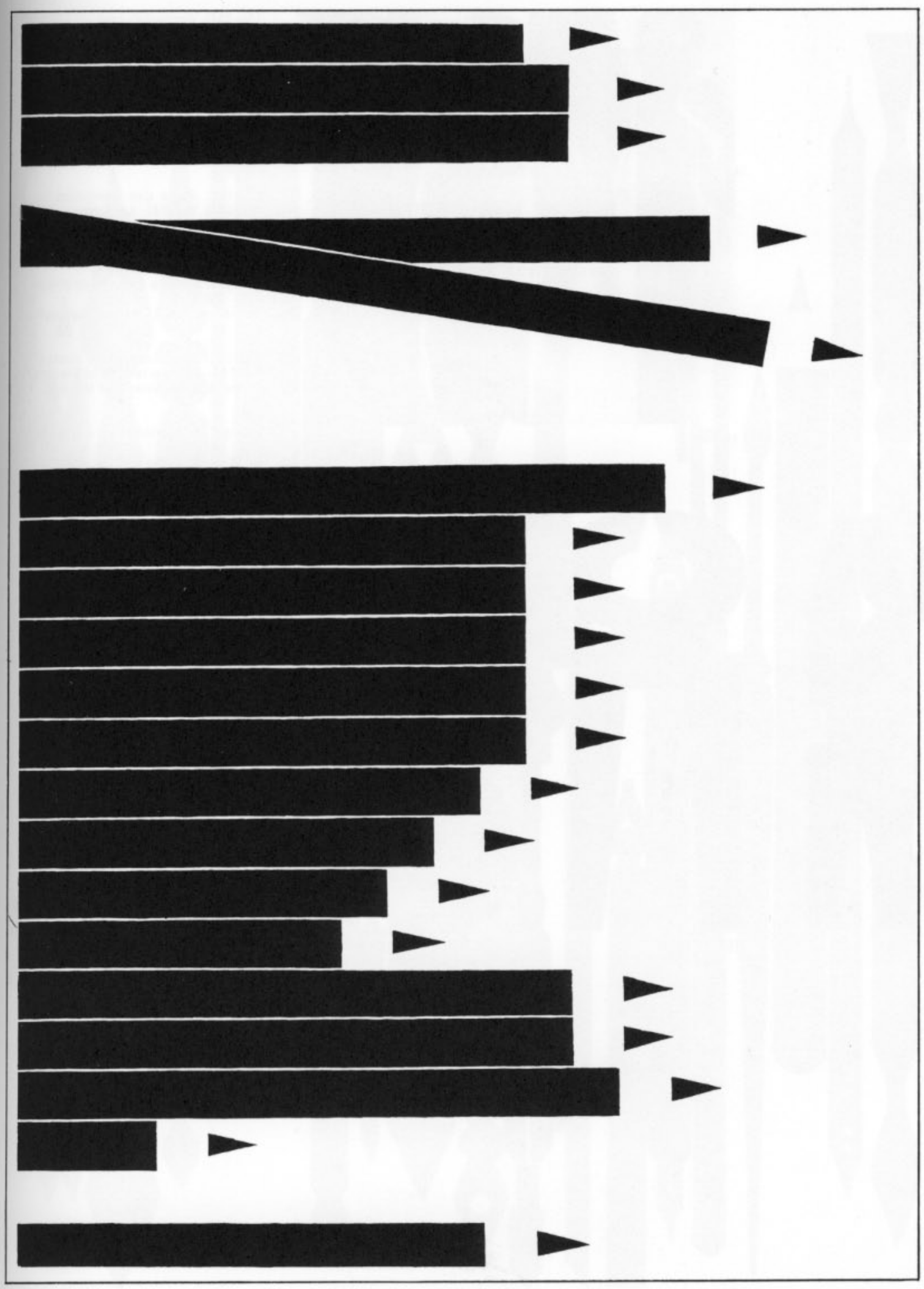
144 145 146 147
Aus dem senkrechten schwarzen Balkenraster werden einzelne Teile weggenommen. Dadurch entstehen gleichwertige schwarze und weiße Figuren. Themen: in der Mitte gehalten; große Gegensätze; verschiedene Gruppen; auf und ab.
148
Signet: Geigenkopf (siehe auch Nr. 301)

144 145 146 147
Différentes parties sont retirées des bandes verticales noires qui forment la trame. Il en résulte des figures noires et des figures blanches qui sont également signifiantes. On peut ainsi exprimer les grands contrastes, les différents groupes, le mouvement de va-et-vient (haut-bas), le fait d'être tenu par le milieu, etc.
148
Symbole: crosse de violon (voir le numéro 301)

144 145 146 147
Certain parts are blanked out from the lattice grid of bars. This gives rise to both black and white figures of equal quality. Themes: steady in the middle; marked contrasts; various groups; up and down.
148
Symbol: head of violin (see No. 301)



148

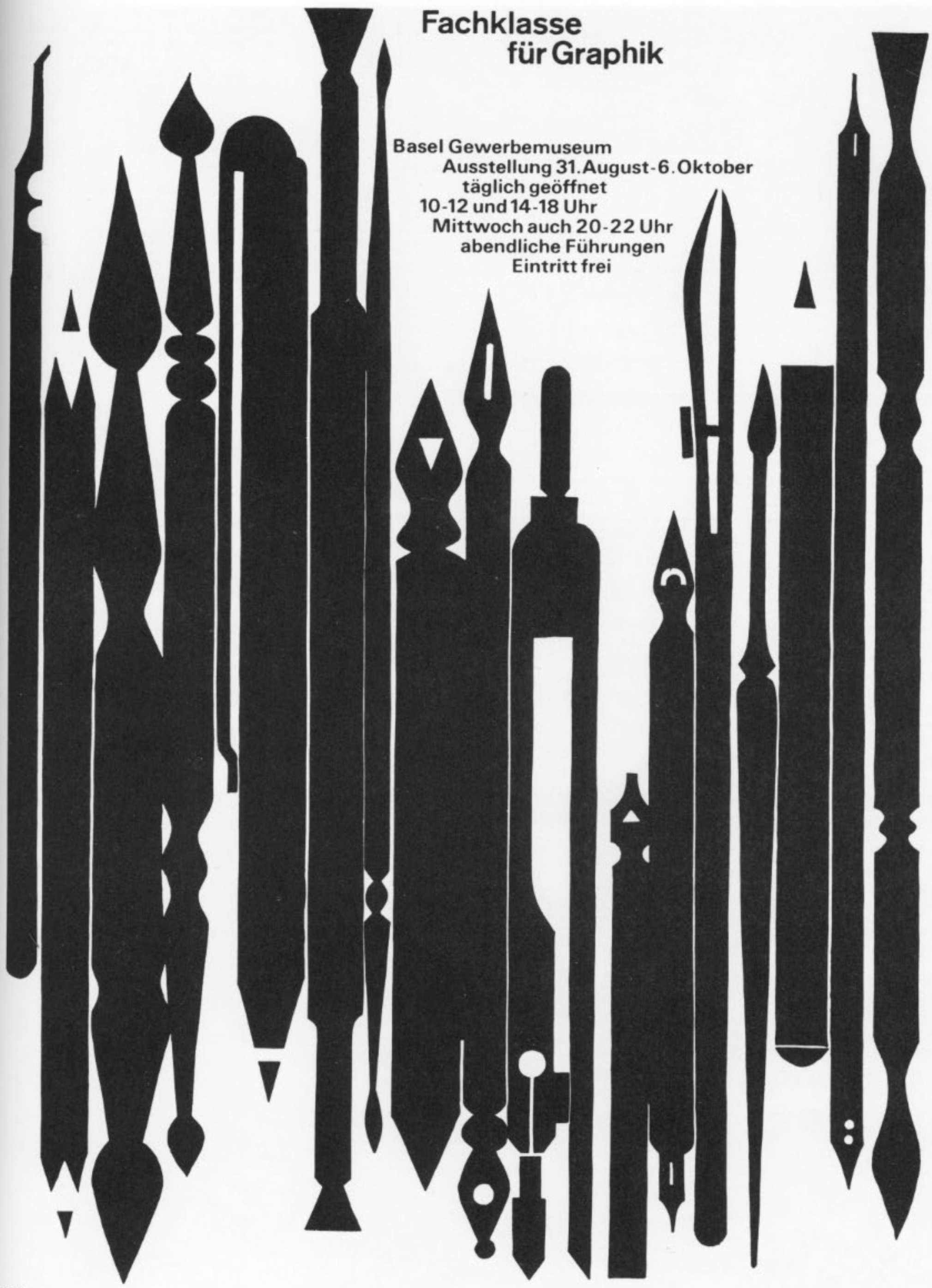


149

149
Entwurf zu einem Plakat für Bleistiftfabrik

149
Projet d'affiche pour une fabrique de crayons

149
Design for a poster for a pencil factory

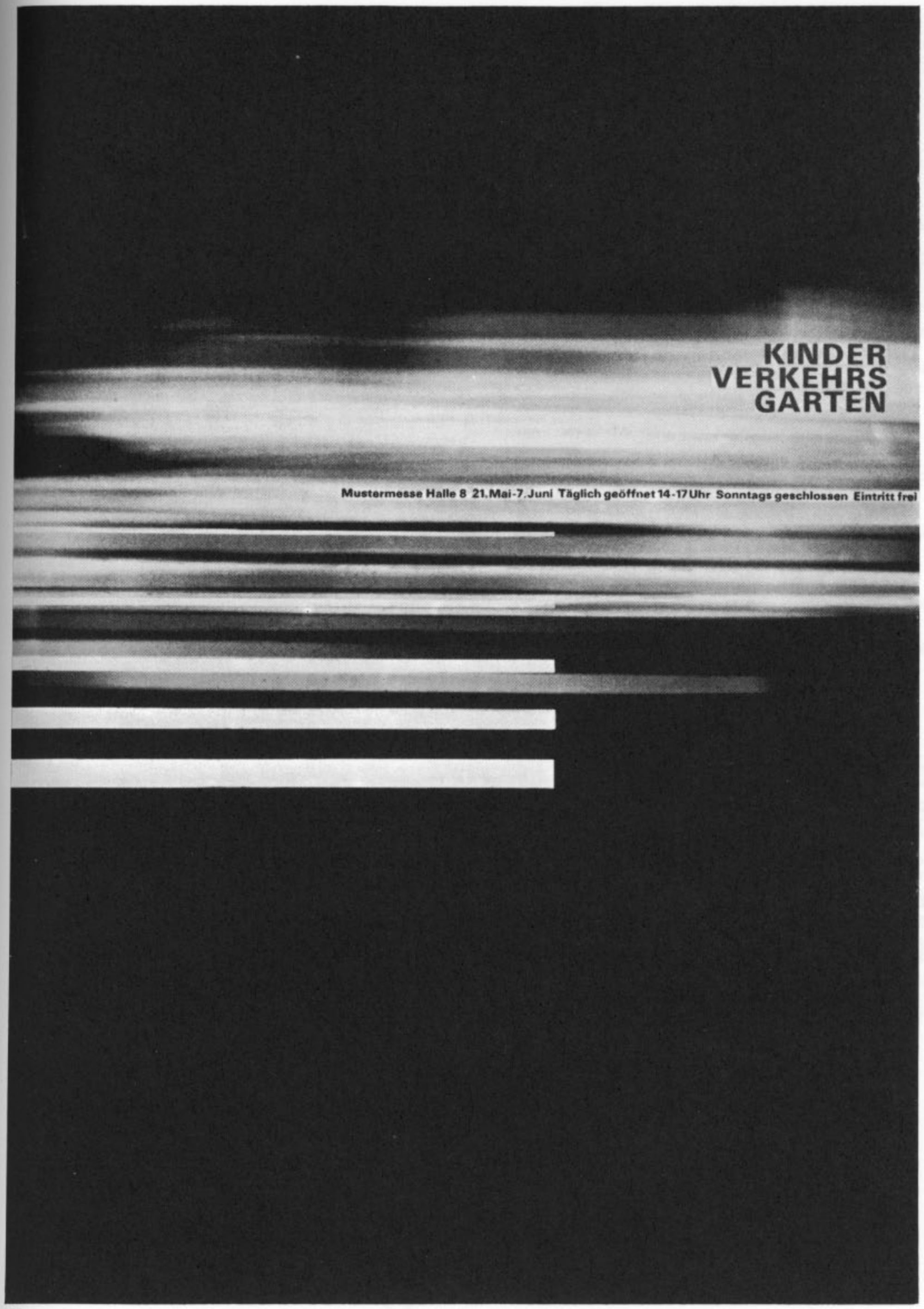


153

153
Plakat für Grafikausstellung

153
Affiche pour une exposition graphique

153
Poster for an exhibition of graphic design



155

155
Kinderverkehrsgarten-Plakat. Gegenüberstellung von fließendem Verkehr und ruhigem Überqueren der Fahrbahn auf dem Fußgängerstreifen. (Photo/Zeichnung)

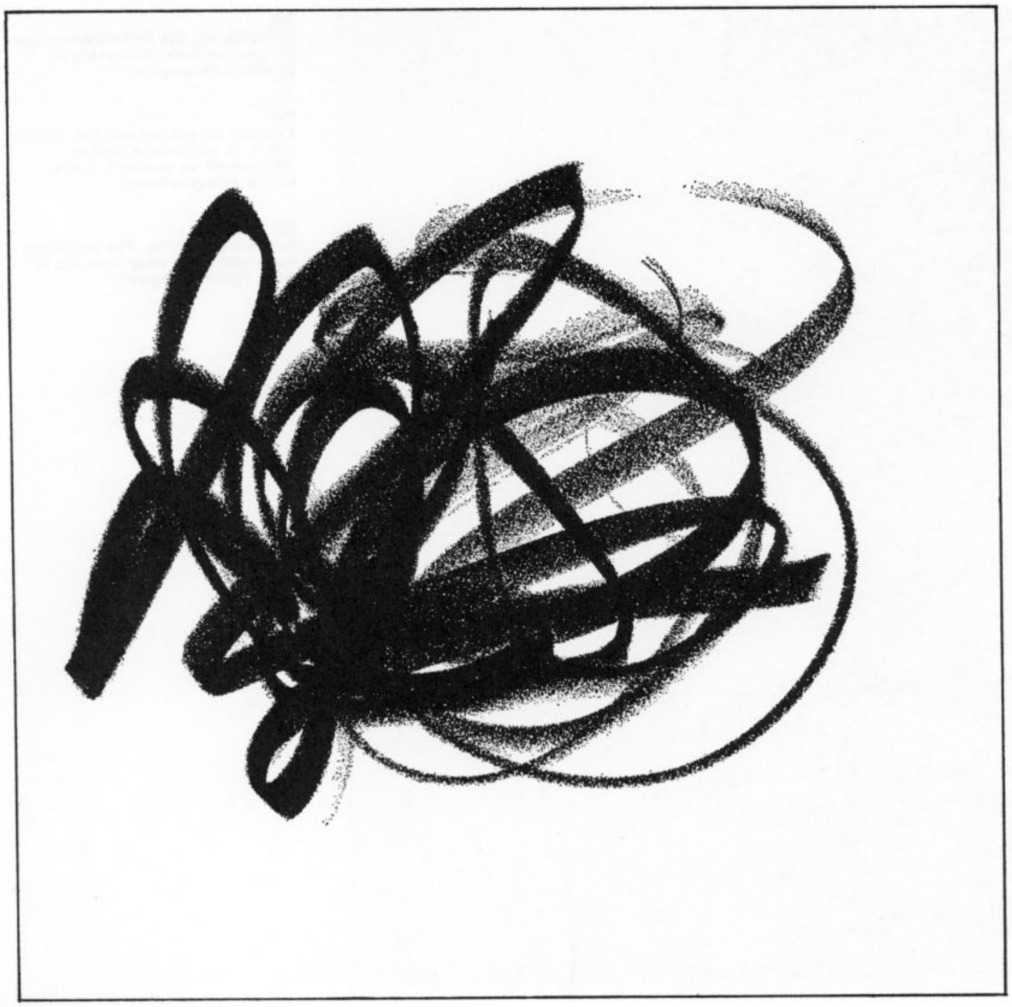
155
Affiche destinée à un circuit de circulation pour enfants. Opposition entre le trafic continu et la traversée tranquille de la chaussée sur les passages réservés aux piétons. (Photo et dessin)

155
Poster for children's traffic school. The rush of traffic is contrasted with the quietness of the pedestrian crosswalk. (Photo and drawing)

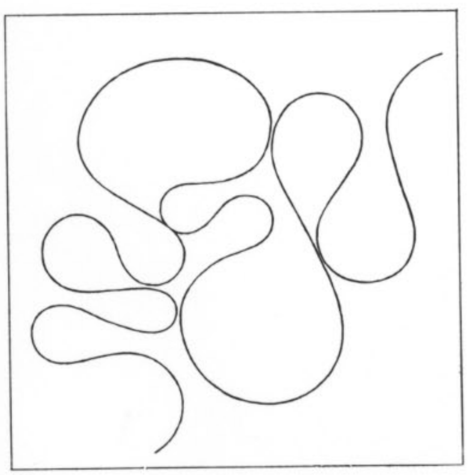
207
Spontane heftige Bewegung mit der Kreide (Lithographie)
208
Langsame Abwicklung einer bewegten Linie mit dünner Feder

207
Mouvement vigoureux et spontané avec de la craie (Lithographie)
208
Lent déroulement d'une ligne ondulée fait à la plume fine

207
Vigorous spontaneous movements with crayon (Lithograph)
208
Slow development of a winding line with a fine pen



207



208

209

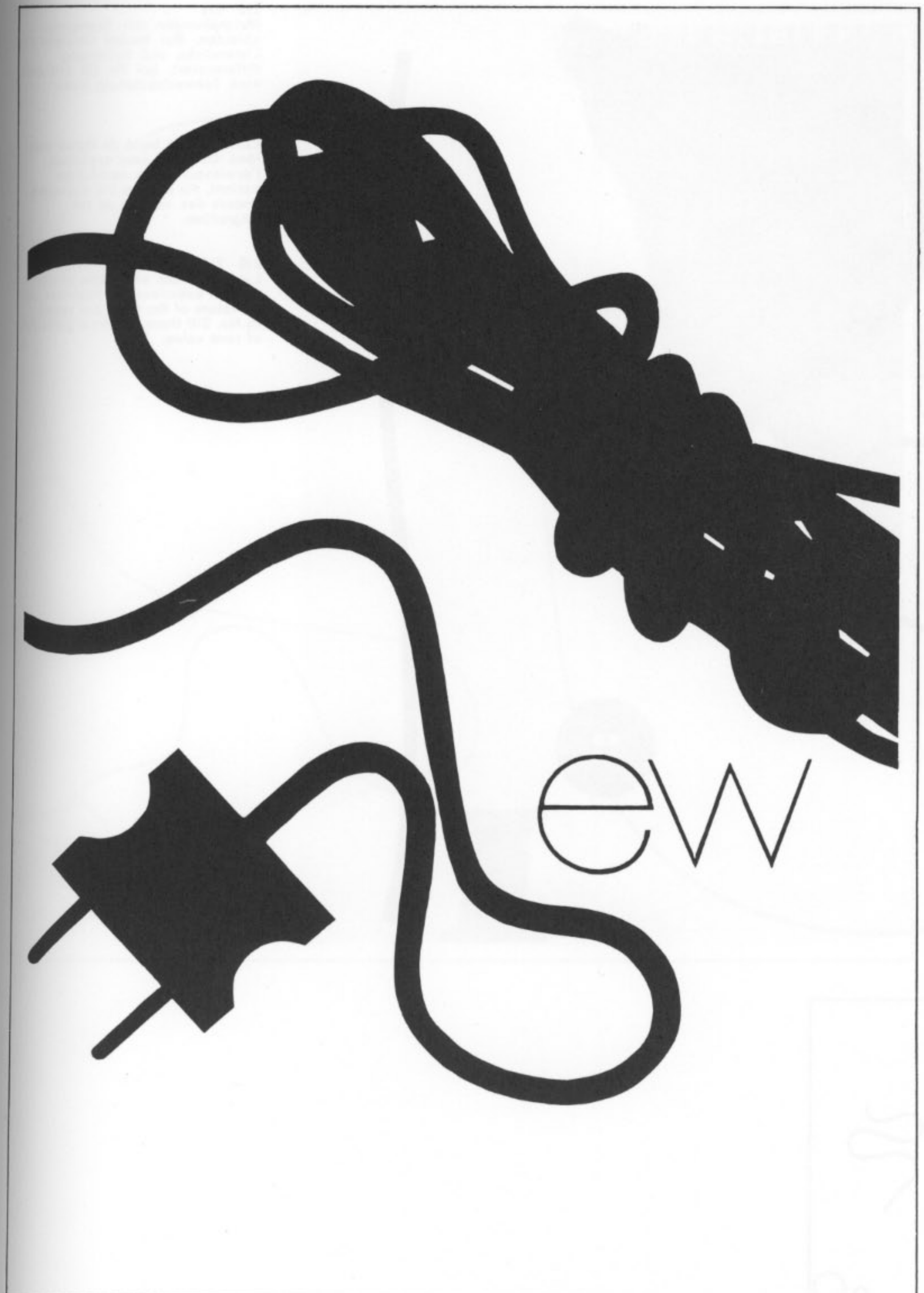
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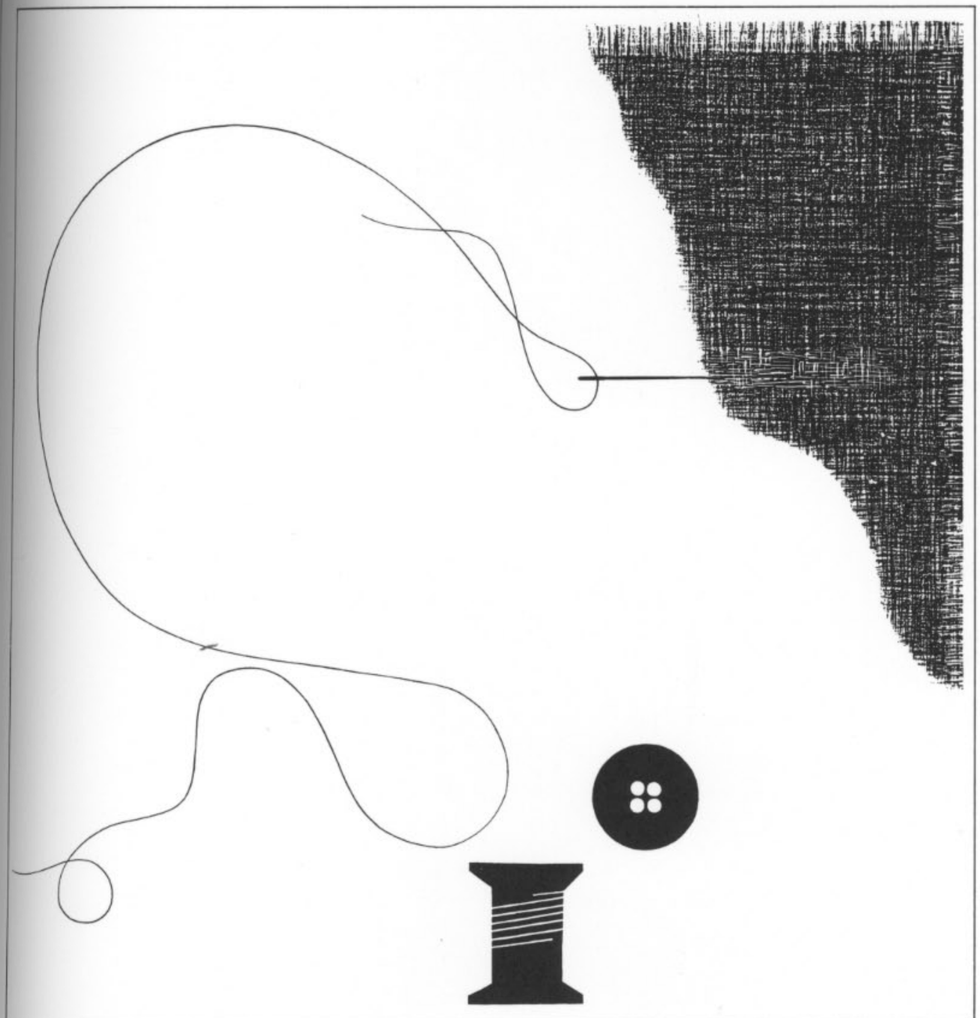


209

209
Inserat für Elektrizitätswerk

209
Annonce pour une fabrique de matériel électrique

209
Advertisement for an electrical power company



212

212
Kompositionsübung, gegenständlich

212
Exercice de composition représentant des objets

212
Composition study, figurative